

**ABSTRACT**

A system and method for managing dependencies in a component-based system. The process includes defining a resource that is part of an entity, recording a resource specifier for the resource, and recording resource dependency relationships definitions for the resource. The resource and its dependency relationships may be deployed to a system. The deployment may include verifying the existence of all dependency relationship resources of the resource on the system and transmitting a warning if any of the dependencies of the resource are unsatisfied. The deployment may also include creating an abstract resource if the abstract resource recorded as a dependency is not found on the system to which the resource is being deployed. The abstract resource may be created based on the dependency relationship definition of the abstract resource. If any dependency relationship is unsatisfied, and deployment can not be completed without the dependency, deployment may be ended. Furthermore, during runtime, the dependency information will be used to create relationships between the management proxies for the resources, thereby providing intelligent control of management state based on these relationships.